

## SARL NEWS - SUNDAY - 6 JULY 2008

You are listening to ZS6SRL, the official Radio Station of the South African Radio League, the National Body for Amateur Radio in South Africa, with a news bulletin that is transmitted every Sunday at 08:15 CAT in Afrikaans and at 08:30 CAT in English. To listen to a web stream visit [www.sarl.org.za](http://www.sarl.org.za), click on ARMI and follow the links for details. PLEASE NOTE! For audio via Echolink, connect to ZS0JPL-R.

You can download this and previous bulletins from [www.sarl.org.za](http://www.sarl.org.za) and you can subscribe there to receive future bulletins by email.

Your newsreader this morning is (name), (callsign), on 145,725 and 7,066 MHz from Pretoria, with relays on 28,325, 14,235, 10,130, 7,066 and 3,695 MHz SSB as well as on 51,400, 438,825 and 1,296 MHz FM in the Pretoria area. (Other news readers please change to suit).

### SILENT KEY

It is with regret that we must announce the passing of Eric McMillan, ZS5JM, on 30 June. He was a founder member and the chairman of the Highway Amateur Radio Club. Our sincere condolences go to his wife, children other relatives and friends.

(PAUSE)

In the news today:

### NEW GROUP TO HANDLE VHF MATTERS

### CAPE TOWN TO PRETORIA ON METEOR SCATTER

### NEW BROCHURE ABOUT AMATEUR RADIO NOW ON THE WEB

### RADIO ZS IN THE POST

You are listening to ZS6SRL. Stay tuned for more detail on these and other important and interesting news items.

### NEW GROUP TO HANDLE VHF MATTERS

The Council of the SARL has appointed Nico van Tonder, ZS6AQ, to set up a committee to handle VHF/UHF band planning, repeater planning and licensing, and VHF/UHF contests. Joining Nico are Vincent Harrison, ZS6BTY, Pierre Holtzhausen, ZS6PJH, and Craig Symington, ZS6RH. The group has already started work on bringing the various records up to date, creating an interactive database and coverage plot for repeaters. A special email address has been created. In future please send all repeater applications and any correspondence pertaining to VHF/UHF matters to [vhf@sarl.org.za](mailto:vhf@sarl.org.za). Clubs are requested to cooperate with Nico when asked for information.

### CAPE TOWN TO PRETORIA ON METEOR SCATTER

On 21 June Pine, ZS6OB, and Naz, ZS1NAZ, made a contact using meteor scatter on 2 metres over a distance of 1 298 km. They used WSJT software, which has opened up a totally new world of communication for radio amateurs with modest equipment. The power used was 5 watt. Pine used four 16-element Yagis, while Naz used a 12-element Yagi. The contact took place around midday, which is normally not the ideal time.

WSJT is a computer program for VHF/UHF communication using state of the art digital techniques. It can decode fraction-of-a-second signals reflected from ionized meteor trails, as well as steady signals more than 10 dB weaker than those required for conventional continuous wave or CW. One of its operating modes, JT65, is particularly optimized for amateur EME (Earth-Moon-Earth) communications. WSJT is open-source software.

To use WSJT one will need a computer equipped with a sound card and running the Microsoft Windows, Linux, or FreeBSD operating systems.

Meteor scatter communications is a radio propagation mode that exploits the ionized trails of meteors during atmospheric entry to establish brief communications paths between radio stations up to 2 250 kilometres apart. As the earth moves along its orbital path, tens of thousands of particles, known as meteors, enter the upper atmosphere. When these meteors begin to burn up, they create a trail of ionized particles that can persist for up to several seconds. The ionization trails can be very dense and are thus used to reflect radio waves. The frequencies that can be reflected by any particular ion trail are determined by the intensity of the ionization created by the meteor, often a function of the initial size of the particle, and are generally between 20 MHz and 500 MHz.

Naz and Pine would welcome opportunities to set up skeds with other stations. Send Pine an email to [janpienaar@ananzi](mailto:janpienaar@ananzi) or to Naz with address [erc@pola.co.za](mailto:erc@pola.co.za).

#### NEW BROCHURE ABOUT AMATEUR RADIO NOW ON THE WEB

The SARL has published a new brochure about amateur radio which is available for download from [www.sarl.org.za](http://www.sarl.org.za). The brochure is in full colour and has been formatted in PDF for easy printing on a colour printer.

#### RADIO ZS IN THE POST

Radio ZS was mailed earlier last week and is now also available for download by SARL members. The May/June edition features several articles on antennas starting with Dave Ingram who in his regular column "Ham Pride and Legacies" writes about various antennae, from an invisible wire antenna to one mounted on a bicycle. In an article "Amateur Radio a foundation for technical knowledge" Hans, ZS6AKV, looks at how amateurs, since the first days of radio, have contributed to technical knowledge and innovation.

Riaan Stopforth, ZS5RA, writes about the installation and calibration of a multi-bipolar antenna, a very interesting concept. A must read!

In Digital Modes, Eddie, ZS6BNE, states that no shack should be without Hamradio de Luxe, an interesting software package that is available free for download.

In addition there are the regular features to add to your reading pleasure.

#### SARL-HMO BEACON PROJECT ON TRACK

John Willescroft, ZS6EF, reports that the SARL-HMO beacon project is on track. The various lessons learned during the trial period have contributed much to an improved design. The beacons have been completed and roll-out will start in the next few weeks. The installation will be on a systematic basis starting in KwaZulu-Natal. Once roll-out commences, SARLNews will report details as the beacons come on line. Information will also be posted on the beacon page on [www.sarl.org.za](http://www.sarl.org.za).

#### CLUB NEWS

##### SANDTON AMATEUR RADIO CLUB TO PRESENT RAE CLASSES

The Sandton Amateur Radio Club ZS6STN will be presenting RAE classes, commencing at 19:00 on 16 July 2008, at the NARC in Honeydew.

Anyone who would like to join the RAE classes can contact Mark Zank on 083 367 8943 for more information.

#### PROPAGATION REPORT

Hannes Coetzee, ZS6BZP, reports that the expected solar activity will be very low. The geomagnetic field is expected to be mostly at quiet to unsettled levels, increasing to active levels on 12 and 13 July. The expected Effective Sun Spot number for the coming week will be less than 5. DX conditions will generally be good to the North and poor in the general northwesterly directions.

20 m will provide the best opportunities for DX. There is a possibility of weak 20 m openings towards India from about 15:00 CAT. Contacts with Australia and New Zealand will be very challenging. From 08:00 and again at 17:00 there may be 20 m openings towards Europe. Contacts with the USA are going to be very challenging.

10 MHz is looking promising late afternoon and after dark for the CW and digital enthusiasts.

Local conditions are going to be good on 40 m during the daytime. 80 m may perform well during the mornings and late afternoons over the shorter distances. 30 m may perform well during the middle of the day over the longer distances.

80 m is the frequency of choice in the evenings, especially now that thunderstorms and static are not so prevalent. 160 m will also perform well during the evenings. It is now a very good time to make a plan with a 160 m antenna, if you haven't got one up already, to experience the thrills and spills of working topband.

Remember that this is only a prediction and that HF always has the capability to surprise you, but you will never know unless you switch your rig on, listen and also call CQ.

Please visit [www.spaceweather.co.za](http://www.spaceweather.co.za) for further information.

#### DIARY OF EVENTS

6 July - Deadline for submission of VHF/UHF/Microwave records; 16 July ZS6STN begins RAE classes.

SARL News invites clubs and individuals to submit news stories of interest to radio amateurs and shortwave listeners. Submit news stories if possible in both English and Afrikaans to [www.sarl.org.za/newsinbox.asp](http://www.sarl.org.za/newsinbox.asp) not later than the Thursday preceding the bulletin date.

The SARL also invites you to listen to the programme Amateur Radio Mirror International, on the air every Sunday morning at 10:00 CAT on 145,750 MHz in the Pretoria area with relays on 7 082, 7 205 and 17 590 kHz. For the webstream and Echolink by ZS6FCS visit [www.sarl.org.za](http://www.sarl.org.za), click on ARMI and follow the links. A repeat transmission can be heard Mondays at 21:00 CAT on 3 215 kHz. Sentech sponsors the ARMI transmissions on the non-amateur frequencies.

Today's South African Radio League news bulletin was compiled by Gustav, ZS6BWN.

Thank you for listening. 73.